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ORIGINAL DEPARTMENT.

LECTURE.

ELECTRO-THERAPEUTICS.

THE REQUISITES OF ELECTRO-MEDICAL INSTRUMENTS.

An Abstract of a Lecture delivered at the Philadelphia School of Anatomy and Surgery,

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In the present lecture I shall ask your attention to some matters of practical interest in regard to galvanic and faradic medical instruments. I do not think that I would be doing you a good service, in a limited course of instruction, to go into a lengthy description of the many forms of apparatus which have been presented to the notice of the profession. Most medico-electric manufacturing firms issue illustrated catalogues, which contain full information in regard to the particular wares which they have for sale.

It is no longer necessary to send to Paris London, Dresden, Berlin or Vienna for what is needed in electrical practice, however famous certain foreign establishments may be for substantial and ingenious workmanship. American manufacturers have, during the last few years, exhibited much enterprise in this direction. On the table before you are various reliable instruments and appliances made by Flemming & Talbot, of 814 Filbert st., Philadelphia. The Galvano Faradic Company, Jerome Kidder, and other firms of this country, also furnish admirable apparatus. Instead of giving a detailed account of any special machines, I will call your attention briefly to a few points and principles which may help to guide you in the selection of apparatus; or, in other words, I will consider some of the requisites and merits of galvanic and of faradic instruments. I will first speak of the galvanic battery proper, in the case of which the force made use of is derived directly from the cells.

The battery should supply enough electricity for any and all demands. Forty reliable cells, of fair size and in good condition, are, I think, sufficient for the general practitioner. I would strongly advise against the purchase of less than thirty by any one; except, perhaps, by an eye-specialist, for whom less might suffice. In hospitals and dispensaries, and by specialists and semi-specialists, sixty cells are generally kept in readiness; but it is rare that more than forty are needed, or that the current from more than this number can be endured by patients. Various circumstances, such, for instance, as the strength and freshness of solutions, and the size, care, and peculiar nature of the cells composing the battery, have, of course, an important bearing on the question I am now discussing; but my remarks are simply intended to apply, in a general way, to the best forms of portable galvanic apparatus in the market.

The individual cells of a medical battery should not be too powerful. If the action going on in the battery is more intense than it should be, the materials consumed will be likely to need renewal too soon and too frequently. For some of the more delicate galvanic applications,

also, a very active single cell might be too strong; and as rheostats, to diminish the strength of the current, are usually wanting, such applications could not be made.

The current supplied by the battery cells should be constant. It should be comparatively smooth and regular, and should not flag appreciably during the time required to make applications. It should also be enduring, lasting, without any marked diminution of force, for a reasonable period. Inconstant batteries are those in which the electricity furnished varies from time to time; and which, owing to certain rapid decompositions and depositions, will not endure long without recharging. Technically speaking, batteries with but one fluid are inconstant. In practice, however, some of these have been found to answer well enough. I might mention, for instance, the cell of Smee, of Stöhrer, and of Grenet. The latter is in common use, and as I am often asked for the exact formula for the preparation of the fluid for it, I will here give that employed by Flemming & Talbot:—Dissolve one ounce of bichromate of potassium in eighteen ounces of water, to which add two ounces of pure sulphuric acid. When the mixture is cool it is ready for use. The elements of the Grenet battery are zinc and carbon.

For those living where they can command the services of mechanical electricians, a good plan is to have a constant battery, of comparatively weak but enduring cells, erected in the cellar or some other convenient place. Such a battery can, of course, be readily connected, by means of the proper wires, with a key-board in the office of the physician. Permanent batteries of this kind require but little attention for many months. The Le Clanche battery, or some of its varieties, and the Becker-Muirhead battery, a modification of Daniell's, are excellent forms.

The materials consumed by a battery should be cheap, and such as can be readily obtained and prepared. In portable batteries nothing should be consumed when the apparatus is not in service. In permanent batteries, however, the consumption of material is so slight that the elements and solutions can be allowed to remain in contact; but the cells, when not in use, should be thrown out of circuit.

The battery should be so constructed that the condition of its cells can be easily ascertained. In portable instruments it is convenient to have a door in front and below, by means of which the cells can be examined, or withdrawn for recharging, without removing the plates. Hard rubber cells are preferable to those of glass or porcelain, because they are not so liable to be broken. Portable batteries, especially, if it is likely that they will have to be often carried from place to place, should be provided with a good hydrostat, which is a lid to prevent the escape of the fluid.

Every galvanic apparatus should have a current selector, to bring into circuit any required number of cells. It should be so arranged as to allow one cell at a time to be introduced for at least a portion of the series, an increase of more than one cell being sometimes not admissible.

Rheotomes or current interrupters, both to work by hand and automatically, are essential. A commutator is also of value. This is an interrupter and something more; being a contrivance for breaking the current and reversing its direction, without removing the electrodes from the surface of the body. This process of voltaic or galvanic alternation, as it is called, is one of the most powerful means of stimulating a nerve or muscle known to the medical electrician. A galvanoscope, for determining the presence and direction of a current, is a useful attachment.

Rheostats are instruments for regulating with great exactness the strength of a current, by intercalating or introducing into the circuit graduated resistances. The subject of conductivity and resistance will hereafter be studied in full; and I will only say here, that by increasing or diminishing the length of circuit, the current strength can be modified as desired. The longer the wire through which the electric force is acting the weaker the current. The wire rheostat, the one, for example, used by Brenner, is constructed of wires of different lengths, and is so arranged, mechanically, that a single unit, a thousand units, or any intervening number of units of resistance can be interposed. For many cases in general practice such a rheostat may not be necessary; but it is an admirable adjunct in strictly scientific electro-therapeutics. Highly interesting experiments have been made on the auditory apparatus with the assistance of wire rheostats. Water rheostats, in which the current is modified by causing it to pass through different thicknesses of liquid, are cheaper than those of

wire, and can be made to serve a useful purpose.

I will now pass on to the discussion of the requisites and merits of a faradic machine, or induction coil.

In the first place, as the battery is the primary source of power, it is important that the faradic apparatus shall have sufficient cell power. In some of the instruments in the market the batteries accompanying the coils are weak and unreliable. Some of the best machines have two cells enclosed in the box. These can be united when great power is required, or one can be used independently of the other. The Galvano-Faradic company supplies an electro magnetic apparatus of this kind. In Flemming & Talbot's best faradic machine both elements can be removed by a simple and easy process, when not in use; and hence they are able to employ long zincs, making two cells unnecessary.

I do not intend to enter now upon the discussion of the question whether the currents from the primary and from the secondary coil are essentially different in their physiological, and hence, in their therapeutical action. I will merely say that, in the present state of our knowledge, a first-class medico-faradic machine should have both coils. The relations of the two coils to each other, and to the magnetic core, should be carefully calculated in the construction of the apparatus, in order that the current afforded shall have a wide range of power, and be capable of ready and exact graduation.

Every faradic instrument should have a thoroughly reliable method of regulating the electric current. The operator should be able to command at will a current of any strength, from the very finest to the most powerful. The current strength, in some cases, is modified by moving the secondary helix in and out upon the primary; but an objection to this plan is, that if, when the electrodes are connected with the outer coil, they should accidentally be touched before the latter is withdrawn, a serious shock might be given. A hollow metallic tube or cylinder sliding over a coil or magnet will modify the current or magnetism. In what is known as Duchenne's volta-faradic apparatus two cylinders are employed, one movable upon the primary and the other upon the secondary helix. The magnetic core is also movable, and gives an additional means of graduating strength, or it may be withdrawn entirely, so as to study the influence of the other graduators independently of temporary magnetization. Perhaps, on the whole, the most convenient mode of regulating the amount of electricity is by the tube or cylinder, which is movable upon the magnetic core, by which either the primary or secondary current is gradually augmented. For very fine graduations, a water-rheostat may be added.

The rheotome, or contrivance for interrupting the current, which is also known by such names as cut-current, break-piece, current-breaker, and the like, is a highly important part of the faradic apparatus. It is quite necessary to have an arrangement for producing both slow and rapid vibrations, and for increasing or diminishing the rapidity of these vibrations. In some varieties of paralysis a slowly broken current is the only form of faradism that will do any good; and, on the other hand, a very rapidly interrupted faradic current, applied by the moist hand, is of great value in some headaches and neuralgias. Manufacturers are beginning to recognize the importance of this matter, neglect of which has done much towards bringing electro-therapeutics into unmerited disrepute. Instruments are now constructed with double levers, by means of which oscillations hundreds of times per second, or as slow as one per second, can be obtained.

I will conclude the lecture with a few considerations which will apply either to galvanic or to faradic instruments. The apparatus should be compact, convenient, simple of construction, and easily put into and out of service. In some of its forms it should be portable. It should be as free as possible from acid vapors. A measure of elegance is desirable, but utility should not be sacrificed to it; nor should it be allowed too much to increase cost. Above everything it should be well made; solid and substantial work being of the utmost value. Whether foreign or home made, it is of great importance to have apparatus which has been thoroughly constructed; for it may embrace valuable scientific and practical ideas, and yet be so slighted in the process of manufacture as to be almost worthless.

—One of Ambroise Paré's applications to wounds, was a "balsame of boyled whelpes and wormes."

COMMUNICATIONS.

A CASE OF COMPLETE RUPTURE OF THE UTERUS AND VAGINA, WITH RECOVERY.

BY G. F. JENKINS, M. D.,
Of Keokuk, Iowa.

Mrs. E., aged 30, of American birth, and of a nervo-phlegmatic temperament, had always been in rather delicate health; had been delivered of four children at the three previous confinements; the last one occurring about two years ago, at which time she was delivered of one living, and one still-born child. All previous labors had been perfectly natural, and not unusually severe.

Her previous history, and that relating to her health since she last became pregnant, I have learned from her since she has so far convalesced as to be able to talk without interfering with her recovery. During this last pregnancy she had been in very poor health; had felt a constant pain in the left lumbar region, many times so severe she could hardly rise from her seat. She was taken with labor pains about 3 o'clock A. M., December 24th, 1876. Her pains were not natural, but, as she described them, of a burning, sickening character. They continued about this way, not many labor pains, but a great deal of suffering, till after 6 o'clock A. M., when she had a very hard, long-continued bearing-down pain, and felt as though the child was pressing low down, and would soon be born. This was followed, after a short interval, by another of the same character, only more severe, and when seemingly at its height, she felt something give way, the forcing ceased, but was followed by a constant sickening pain, intense suffering, restlessness and anxiety, with profuse flooding, fainting, and rapid collapse.

About two hours after the occurrence of this accident I was called to attend her. The messenger, her husband, informed me, before reaching the house, that she was flooding badly, and had fainted; that there was a midwife in attendance, and she had requested him to come for me, as "there was something wrong." Learning that the woman was undelivered, and from these statements, I concluded I had a case of *placenta prævia* to deal with.

Upon my arrival I found her lying on her back, her face blanched and bathed in cold perspiration, her eyes sunken, and her whole countenance too unmistakably expressing the fact that life was fast ebbing away. The profound collapse, and the formation of firm coagula in the laceration and vagina, had, for the time, partially checked the hemorrhage. The feeble, flickering pulse plainly indicated that the column of blood was barely sufficient to stimulate the heart to action. My patient being in this critical condition, there was evidently no time for consultation with the midwife in attendance, to ascertain the previous history of the case. So, acting on my preconceived notion, that it was a case of *placenta prævia*, I drew my coat, bared my arm, and oiled it, intending to tear through the placenta and grasp the feet. On passing in two fingers I could feel no child, nothing but clots of blood, and what I supposed to be the placenta detached on one side. I immediately passed the other hand over the abdomen, and was surprised to find how distinctly I could outline the position of the child. It lay crosswise, on a level with the umbilicus, with the back upward, the head to the right, and the feet to the left side. I accounted for this unusual condition of things, by the profuse hemorrhage producing complete relaxation of the uterine tissues.

Having thus easily located the feet, I passed the hand into the vagina, turned out the clots, passed it on, as I supposed, through the relaxed os, and around the partially detached placenta. To my surprise, at this point, however, my hand came in contact with the promontory of the sacrum, and by following the vertebral column a little further up I felt the pulsations of the abdominal aorta at its bifurcation. Of course, I now immediately realized that I had to deal with a case of rupture of the uterus, extending from the posterior lip of the os, upward; that my hand was really in the abdominal cavity, and not far from where I had located the feet. I instantly resolved that the correct line of practice was to pass the hand on till I could grasp the feet, and deliver as quickly as possible. I easily succeeded in getting hold of the feet without rupturing the membranes. I drew them down into the vaginal canal, after which I pinched the membranes between the thumb and finger nails, and in this way succeeded in evacuating the liquor amnii. This unusually tough condition

of the membranes is the only reason I can give for their not rupturing before the child escaped into the peritoneal sack. When I had the child well down into the vagina, so as to act as a tampon to the bleeding vessels, I paused for a few moments, and ordered a teaspoonful of the fluid extract of ergot to be given, for the purpose of stimulating uterine contractions and arresting hemorrhage. I thought a few moments' delay would give the mother a better chance for recovery, and as there was no sign of life in the child, its safety was not taken into consideration. After having waited a few moments for uterine contraction, I delivered her, without difficulty, of a male child, weighing about nine pounds. She was given another dose of ergot, and the placenta immediately extracted by traction on the cord, assisted by pressure applied to the uterus according to Crede's method. The uterus contracted quite firmly, and hemorrhage was not at all alarming. Soiled clothing and bedding were removed, as far as could be without exertion on her part, a dry folded sheet placed under her hips, and a warm napkin applied to the vulva; after which a firm binder, with compress over the hypogastric region, was applied.

Having thus made her as comfortable as possible, I instructed the nurse to keep her perfectly quiet, on her back, with her head low, till I returned. Before leaving, however, I wrote a prescription, a teaspoonful of which was to be taken every four hours, and oftener if pain was severe; each dose contained one-fourth of a grain of morphine and four grains of quinine.

When I returned, about six hours after delivery, I found her suffering intense pain, notwithstanding she had taken the medicine as directed. Upon examination I found that reaction had taken place, and that peritoneal inflammation had already set in. Her pulse was 130 per minute; there was marked tenderness over the entire abdomen, and tympanitis; she lay on her back with her limbs drawn up, and in fact, she presented at this early period all those alarming symptoms that denote an invasion of that formidable and dreaded disease, puerperal peritonitis. I had expected inflammation, and was prepared to fight it as long as life lasted.

I immediately prescribed tincture verat. viride in five-drop doses, to be given alternately with the anodyne and antipyretic mixture above given. I will not detail the symptoms as they occurred from day to day, but will describe some of the more important features characterizing the attack, and the treatment relied upon to conduct it to its favorable issue.

The abdomen became distended to its utmost; tenderness exquisite; pulse rose to 150 per minute, before we got her fully under the influence of the veratrum; vomiting did not occur until the arterial sedative had fully asserted itself, and the pulse was reduced, and then it did not become at all troublesome or uncontrolable.

Turpentine stupes were applied to the abdomen, whenever pain became excessive, and allowed to remain as long as they could be tolerated, and after their removal, hop fomentations were used vigorously. This constituted the treatment as long as inflammation lasted. Carbolic acid injections were used twice daily, to gently syringe out the vagina, and thus disinfect the discharge. The discharge continued to be abundant and very offensive for about sixteen days, after which time it rapidly became less profuse and ceased to be purulent.

There never was any secretion of milk; the breasts soon becoming perfectly flaccid. The treatment secured constipation of the bowels, which were moved for the first time, by an enema, on the tenth day. She was encouraged, from the first, to take beef essence and other concentrated nourishment freely. After the inflammation had subsided, she was given twenty drops of tincture ferri mur. three times daily; also, ergot, bromide potassium, and compound tincture cinchona, in combination.

At the time of delivery I was unable to exactly locate the seat of the rupture, without making, in my opinion, injurious and unwarranted manipulations. I knew it was posterior, and extended from the cervix, well up the body of the uterus. I had felt a laceration of this character, after extracting the placenta. But about ten days after delivery, upon making a vaginal examination to ascertain the condition of the parts, I found that the rent had extended about an inch and a half into the vagina. I could distinctly feel the seam-like cicatrix, still indurated and covered with granulations, passing upward through the vaginal portion of the cervix uteri—which it had almost obliterated—posteriorly and to the left side of the median line.

She has convalesced very rapidly, considering

her extreme exsanguinous condition, and subsequent violent attack of peritonitis.

Had I been in attendance upon the case previous to the rupture, I could not have possibly mistaken it for a case of placenta prævia. But not being called for nearly two hours after the child had escaped into the abdominal cavity, the profuse hemorrhage and violent collapse, occurring in an undelivered woman, called to my mind a case of placenta prævia I had attended on a former occasion. The previous history, of course, had it been obtained, would have elucidated the case.

In the treatment of the subsequent peritonitis, I followed the recommendations detailed by Professor Fordyce Barker, in his excellent work on puerperal diseases.

In reference to the cause, pathology, frequency, and general history of this the most fearful and fatal of all accidents met with in the practice of midwifery, I cannot do better than refer the reader to Leishman's recent work on obstetrics, or to that of Churchill, which contains complete and well authenticated statistics upon the subject.

Taking into consideration the condition of this woman during the term of pregnancy, her delicate health, the fixed pain in the left lumbar region, together with the burning, stinging character of the pain at this spot after labor had really set in, I think there must have been, as a predisposing cause, more or less inflammatory action at this point during pregnancy, producing softening, and an unyielding condition of the uterine walls where the rupture occurred. The exciting cause was undoubtedly the abnormally violent and long continued determined effort of the womb to expel its contents during these last two pains, the os uteri being in an undilatable and rigid condition.

ANTISEPTIC SURGERY.

BY J. B. GARRISON, M. D.,
Of De Witt, Arkansas.

Since the publication in the MEDICAL AND SURGICAL REPORTER, some years ago, of a series of articles relative to the simple method employed by myself to secure primary union in wounds of a certain nature, I have extended the range of its applicability to capital operations of such gravity that I think a report of a few of the cases may not be uninteresting to the profession. The method referred to above consists in securing exact, firm apposition of cut surfaces, using no sponges, but instead, old linen or cotton cloths dipped in carbolized water, using carbolized ligatures and sutures, and the subsequent constant application of a solution of carbolic acid, two drachms to the pint of water, ordinarily of the temperature of the body in health. Those who desire a more extended explanation of the usual method employed, can find it in a communication published in the REPORTER in the spring of 1873. I frequently use a modification of the above treatment in cases where the solution of continuity does not extend to any great depth, and for other reasons, which will be explained in the report of cases appended:—

CASE 1.—Mrs. Josephine P., aged 22, had a large fibrous tumor of fifteen years' growth, covering almost the whole of the right side of her face and neck, having its origin in and its base attached to the parotid gland. After a week's preparatory treatment, I removed it (May 17th, 1875), in the presence of and assisted by Drs. E. Visart, J. H. Hutchinson, John A. Morgan, George McCarty and M. McCarty. The operation was commenced by a straight incision down upon the tumor, extending from a point opposite the temporal fossa nearly to the clavicle, and on a line anterior to the course of the external jugular vein. By a close and careful dissection none of the large vessels were cut, and the only considerable hemorrhage was from some half dozen nutrient arteries and from the point of attachment to the parotid gland. This was controlled by torsion and compression. After the removal there was a large amount of redundant tissue hanging sacculated on either side of the incision, and in consequence I did not even hope for primary union. Nevertheless, I applied constantly the carbolic solution, crowded the loose hanging tissue into the space previously occupied by the tumor, and kept it there by means of a compress made of small shot distributed between layers of carded cotton. Not one drop of pus formed after this; union was perfect in the line of incision in 24 hours, and there is now but a faint line left as an evidence of the once horrible deformity.

CASE 2.—During the month of August, 1875, I was sent for by Dr. Parker, of St. Charles, to see a patient, John George, aged sixty, fisherman. He had been shot through the leg some three weeks previously, and from inattention

mortification ensued. On my arrival I found the limb gangrenous to the knee, pulse 160, and very feeble, and the patient apparently *in extremis*. He was lying in a wretched hovel on the bank of the river, and the weather was excessively hot and sultry. I immediately commenced giving him brandy and morphine to get his condition up to the operating point. (I invariably give an opiate and an alcoholic stimulant in every case before chloroforming.) About four o'clock P. M., a table was improvised by sticking the ends of a couple of planks in a crack of the cabin, on its shady side, the opposite ends resting on a barrel. A great many of the citizens of the town flocked to the scene, several of whom gave me material aid, one chloroforming, another managing the tourniquet, and others holding and steadying the limbs. I amputated the thigh at the lower third in the usual flap manner, except that the flaps were cut *shorter* and *thicker*. The reason is obvious. No water was used in sponging except the carbolated; the arteries were tied very tightly with carbolized ligatures, and the flaps firmly drawn together and accurately coapted, and kept so by deep, continuous, uninterrupted sutures, tightly drawn. A compress of several thicknesses of old linen was placed over the stump, and over and around it a firm supporting bandage. I then elevated the stump at an angle of forty-five degrees and directed the continued application of the carbolated water. Perfect union took place at once. No suppuration occurred even in the track of the ligatures and suture, which Dr. Parker removed on the fourth day. The patient was going about on his crutches in a week.

Dr. Treadwell, an accomplished surgeon, living on the Arkansas river, some years since performed an amputation at the shoulder joint, used the carbolated solution, and got union by first intention.

Last summer I removed a tumor from a boy's thumb. I diagnosed it as cartilaginous, but, to my great surprise and vexation, I found around its base a rim of the hardest bone I ever tried to cut. It took me a long time to get it smoothed down to my notion; the joint was opened while at it, nevertheless I treated the wound in my usual way, and contrary to my expectation it was well in three days, though the joint was a little stiff for a few weeks. I recently amputated two fingers at the metacarpo-phalangeal articulation, without subsequent suppuration. These cases show the adaptability of my method to joint amputations. I would remark here that in all my recent cases of amputation, I have practiced torsion of the arteries as recommended by M. Tillaux, of the Hospital of St. Antoine, Paris, and greatly prefer it to ligation. I will now briefly notice some cases in which a modification of the above treatment was used.

Case 1.—Joe Davis, aged thirty-nine, colored burglar, on the night of November 19th, 1876, was shot in the back with a conical ball from a Colt's revolver, a size smaller than the navy. I saw him a few hours afterward. He was a robust, athletic, full-blooded negro; was pulseless; respiration hurried and spasmodic; expectorating blood. Gave him an opiate and whisky, and on examination found that the ball had entered near the inferior angle of the left scapula, passed through the lung, and could be felt between the ribs just beneath the left nipple and over the heart. I proceeded immediately to cut it out, and carbolized both wounds thoroughly by introducing small cloths saturated with the solution, *ut supra*. Then I pinched together the tissue around the bullet hole, and sealed it up by repeated layers of isinglass plaster. The wound made for the removal of the ball was treated in the same way. When the plasters wore off there was no sign of pus, and the wounds were healed. The pleural cavity was full of blood when I first saw him, but the fluid portion of it must have been absorbed, as he gradually improved, the lung regained its lost resonance, and I discharged him from treatment on the twelfth day after the injury. It is a mystery to me, and was also to Dr. Visart, who saw the case with me, how the bullet escaped his heart. I gave him calomel and Dover's powder, with quinine and stimulants for several days at first. His appetite was never impaired nor did he have any fever or elevation of temperature.

Case 2.—November 3d, 1874, J. H. M., Esq., was struck once in the forehead and twice on the cheek with an instrument known as "brass knucks," each blow cutting to the bone. The wounds inflicted by this weapon are peculiar in their nature, being incised, lacerated, and contused. Under ordinary treatment they are difficult to heal, suppurating freely and leaving unsightly scars. I furnished him with the carbolized solution, and let him apply it himself constantly

for two hours, at the expiration of which time I approximated the cut surfaces accurately by means of small strips of isinglass plaster, and over these applied repeated layers of the same, broad enough to extend an inch around the wounds. This was the only dressing ever applied to them. When the plasters came away a red line only marked the places, and to day there is not a trace of them.

These cases are selected at random from hundreds that have come under my observation in the last ten years, and the results are not exceptional but invariable. Quite a number of physicians have reported a success equal to mine, with the same treatment.

I do not claim to have discovered a ray of new light on this subject, but only to have somewhat systematized a method of procedure in dressing fresh wounds, than which a better could not be, for it never fails. Try it.

ON THE ADOPTION OF THE METRIC SYSTEM.

BY CHARLES CARTER, M. D., PH. G.,
Of Philadelphia.

The objections to the general adoption of the metric system, in prescriptions, are:—

First. The difficulty in converting the old system of weights and measures into it. To express the value of the system in which we have learned the proper doses of medicines, and how to apportion them in prescribing, into the kilogramme, hectogramme, decagramme, gramme, decigramme, centigramme, or milligramme, would consume too much time, even with the aid of a table.

Second. The possibility of omitting the proper decimal points, or ciphers, in the prescription, or of their becoming rubbed out, if written with pencil; also, the possibility of the gramme being mistaken for grain, if abbreviated to gr. or grm.

To overcome these objections, I would propose the use, in prescriptions, of the gramme *only*, with its multiples and fractions, excluding the employment of all decimal points and ciphers.

The value of the gramme, being about fifteen and a half grains, is easily remembered, and can be readily adapted, without any confusion, to present weights and measures, even to the ordinary domestic measures of tea and tablespoon.

In medical literature we occasionally see the fraction of a gramme mentioned. I can see no objection to its division, and it would help us to have it generally understood that, in using such division or fraction of a gramme, sixteen grains be taken as the standard. The practical difference between this and the actual standard is very slight. Then let it, also, be understood that, in the *multiples* of the gramme, fifteen grains will be taken as the practical standard. We see, then, that one sixteenth of a gramme is equivalent to one grain, or minim; four grammes to one drachm, or a teaspoonful; sixteen grammes to a half-ounce, or tablespoonful; and thirty-two grammes to one ounce.

As has been suggested,* the word grammes should be printed on the prescription blank, at the upper right hand corner, over the figures to be used. A few examples will illustrate:—

For J. S.

		Grammes.	
℞.	Morphiæ sulph.,	$\frac{1}{16}$	(= gr.j)
	Aquæ font.,	32	(= ℥j) M.

Dose.—Teaspoonful at night.

		Grammes.	
℞.	Potassii iodidi,	4	(= ʒj)
	Aquæ font.,	64	(= ℥ij)
	Syr. sarsap. comp.,	32	(= ℥j) M.

Sig.—Tablespoonful three times daily.

For A. B.

		Grammes.	
℞.	Hydrarg. chlorid. mite,	$\frac{1}{16}$	(= gr.j)
	Sacchar. alb.,	$\frac{3}{4}$	(= gr.xij) M.

Divide in Chart No. 12.

Sig.—One every two hours.

For B. C.

		Grammes.	
℞.	Pulv. aloes,	$1\frac{1}{2}$	(= gr.xxiv)
	Ext. belladon.,	$\frac{3}{8}$	(= gr.vj)
	Ext. nucis vom.,	$\frac{3}{8}$	(= gr.vj)
	Pulv. capsici,	$\frac{3}{4}$	(= gr.xij) M.

Ft. pill No. 24.

Sig.—One at night.

It is understood that these prescriptions are to be dispensed by weight, according to the metric system. But the fluid measure may be easily used for fluids, in which case the prescriber could prefix the fluid, as is done by many physicians at present in the old system. The graduate measures could be marked in grammes, and on the other side the equivalent in drachms and ounces be placed, if desired.

I believe this view of the subject is practicable. It is simple, accurate, easily understood,

* *Medical Record*, December 23d, 1876.

and adapted to present standards of weights and measures, and not liable to result in any error on the part of the prescriber or compounder.

In this way, by first practically learning the value of the gramme, we will be enabled to gradually comprehend the rest of the metric system, and to understand it whenever we meet with it in medical literature. It will thus serve us as an introduction to the final adoption of the system in full, should such become necessary.

610 *Fairmount Avenue.*

Medical Societies.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

REPORTED BY DR. FRANK WOODBURY.

Conversational Meeting, held in the Hall of the College of Physicians, January 24th, 1877. Dr. H. H. Smith, President, in the chair.

Dr. Thomas M. Drysdale read his paper on "the Use of Chlorate of Potassa in Diphtheria and Pseudo-Membranous Croup." See page 237, No. 1046.

After passing a vote of thanks, the Society proceeded to the discussion of the paper.

Dr. J. Solis Cohen acknowledged his gratification from hearing the sentiments contained in the paper of the evening, having been particularly interested in the history of the case in which a fibrinous cast of the trachea had been expelled. In a case seen with Dr. Collins, and elsewhere reported, a patient expectorated eight distinct casts of the trachea within forty-eight hours, and he had always thought that if tracheotomy had been performed in that case, instead of sitting beside it ready to operate when absolutely necessary, that false membrane might have choked the tube and suffocated the patient. The danger from chlorate of potassa in large doses is, that it is thought to cause albuminuria, thus, perhaps, aggravating a morbid state often complicating diphtheria, where the amount of the albumen in the urine is considered to indicate the gravity of the disease. He uses chlorate of potassa in such cases, in the form of lozenges, taken freely, not given because of specific efficacy, but because it is detergent, and in this form is kept constantly in contact with the diseased structures. He had noticed that in diphtheria all the preparations containing chlorine are useful, and each have found special advocates; for instance, tincture of iron (which, like chlorate of potassa, is generally given in too small doses), muriate of ammonia, hydrochloric acid, the chlorine mixture recommended by Watson; and lastly, calomel, which is also a chlorine salt, and is supposed to exert both a constitutional and a local effect.

Dr. M. O'Hara had tried saturated solution of chlorate of potassa in diphtheria, but had seen no benefit in three or four cases. In his own child, a typical case of diphtheria, the saturated solution freely used had given no evident result; but the child subsequently recovered on the use of calomel and soda. He inquired as to the natural history of the disease; whether some epidemics are not more fatal than others, and, if in the lighter form, recovery would not follow in a large proportion of cases, whether chlorate of potassa were used or not?

Dr. Solis Cohen regards diphtheria as a self-limiting disease, in which, if the patient's strength can be kept up until the force of the poison is spent, spontaneous recovery is to be expected.

Dr. Thomas Hay reported a case of diphtheria, occurring in 1870, where he had intended to perform tracheotomy, but before doing so decided to give chlorate of potassa in large doses, with frequent inhalations of the vapor from slacking lime (using about half a bushel at a time). Although the case (previously treated by tartar emetic and calomel) was a grave one, indeed, almost in articulo mortis, with albumen and blood in the urine; face puffy and cyanosed, and false membrane lining the air passages, under the new treatment the little girl rapidly recovered, coughing up large patches of exudation. It is believed that the cure was effected by the chlorate of potassa in large doses, and the lime inhalations, which it was noticed invariably gave temporary relief, being used thrice daily, or oftener.

Dr. Thomas Andrews had experienced, while suffering from diphtheria, great relief from the tightness and aching of the larynx, by the use of a gargle of lime water, the general treatment being tincture of iron and stimulants.

Dr. Cohen prefers the steam rising from slacking lime, as the particles of lime held in suspension by the vapor may get underneath the false membrane and actually assist mechanically in its separation and disintegration.

Dr. George Hamilton noticed that if tracheotomy had been performed in the cases mentioned, and recovery had followed, it would have been thought that tracheotomy alone saved them.

Dr. Cohen.—And had the patient died after the operation, it might be said that he would have died anyhow. He recalled another desperate case where it was regarded as the final resort, but no surgeon could be found willing to operate; the patient subsequently recovered under lime inhalations, without tracheotomy.

Dr. Benjamin Lee was gratified by observing the ground taken by the lecturer in the article read. In a paper published a few years ago, the speaker urged the importance of treating every acute sore throat as one of incipient diphtheria, that is by giving chlorate of potassa as a specific, and supporting the patient. As long as physicians regard pseudo-membranous croup as a sthenic disease, we shall have a large mortality.

The key-note in the treatment of diphtheria has been struck this evening, by the remark made that chlorine is the active agent in nearly all the successful remedies for diphtheria. Potassium offers unusual advantages as a base to carry this element into the system, as it forms other combinations readily. The speaker generally orders it in the following form, which he regards as the most efficacious mode of administration:—

℞. Potassii chlorat., ℈viij
Acidi hydrochlorici, ♏viij.

Rub these together until chlorine fumes arise, then add

Aquæ cinnamon., ad fl.℥viij. M.

This he called the chlorinated solution of chlorate of potassa, given in tablespoonful doses, or varied according to age.

Dr. J. S. Eshleman has had good results from the use of lime water by the atomizer. In a case of sthenic croup he had used chlorate of potassa with tincture of iron in large doses, but was disappointed in its results; he then substituted the compound syrup of squills with great satisfaction. In the next six or seven cases of the kind he began with drachm doses of the syrup, given until vomiting occurred, and then reduced to doses so small as just to keep the patient gently under its influence. All the cases got well. But in real diphtheria, with patches on the tonsils, offensive breath and blood-poisoning, he relies on chlorate of potassa, iron, and a supporting treatment.

Dr. Cohen being interrogated as to his treatment of diphtheria, said that his routine treatment of the disease was to place the patient in a room that was both well warmed and well ventilated, but free from draughts. The air of the apartment should be loaded with steam, by a little boiler on a gas stove, or by a bucket of boiling water into which cloths may be dipped and hung up about the room. If the chamber is too large to fill with vapor the bed may be enclosed in sheets. The patient is allowed chlorate of potassium lozenges ad libitum, and takes lime inhalations three or four times daily. We get rid of the specific products by detergent washes. Then, as to general treatment, the patient must be well nourished by strong soups, milk, and some alcoholic stimulant. In addition to this, the speaker gives, in the height of the disease, tincture of iron (two to ten drops to a child, 25 drops to an adult) every hour or half-hour until some improvement is noticed.

Dr. R. Burns favored the treatment recommended in the paper, but generally relies upon a mixture of the three chlorides—chlorate of potassa, muriate of ammonia, and tincture of iron; he has had satisfactory results from this treatment, supporting the system, giving stimulants from the beginning. He considered the blood poisoning as of more importance than the throat symptoms, and depends on systemic rather than local treatment. Having seen cases die after the disappearance of the membrane from the throat, he inquired whether death might not occur in such patients from heart clot?

Dr. Cohen said that Dr. J. Forsyth Meigs, of this city, has published the autopsies of several such cases, in the *American Journal of Medical Sciences*, some years ago, and Dr. Richardson, of London, had also called attention to this mode of death in diphtheria, confirming Dr. Burns' opinion.

Dr. Charles F. Wittig regards diphtheria as a specific disease characterized by the formation of a false membrane, after the deposition of some peculiar matter upon any mucous membrane, not being restricted to that of the fauces; it may be formed even upon the external skin, when denuded of its epidermis, as in nosocomial gangrene. It is uncertain whether this morbific agent is derived directly from the atmosphere, or deposited after it has passed, in the organism, through various changes; probably both ways are taken. As soon as the pseudo-membrane is exuded, it will be destroyed, being dissolved into a putrid matter which will not only corrode the neighboring parts, but if taken up by the absorbent vessels, may also infect the whole system. The indications for treatment are, therefore, first, during the forming stage of the individual case, to aid the general reaction of the organism against the poison by such remedies as will simultaneously promote its elimination, such as hydrochlorate of ammonia, spirits of Mindererus, sweet spirits of nitre, chlorine water, tartar emetic in sufficient doses to produce emesis; and at the period when the putrid matter has been taken up by the blood, to sustain the system and counteract putrefaction, by antiseptics, tonics and an appropriate diet. In considering the second or local indication, we are met with the question, does the systemic infection proceed from the deposit, or is the latter a mere symptom of the former? In the former case we should endeavor to destroy it by all means, employing caustics, both alkalies and mineral acids, in their dilution, nitrate of silver, sulphate of copper, alum, and, especially in the milder forms of the disease, the salts formed by hydrochloric acid with potassa or soda; in the latter case, on the contrary, it is sufficient to use astringent gargles and the milder application of lime water, a solution of borax, chlorine water, etc. The former method is, however, preferable to the latter, since the deposit, when not removed, will be sooner or later dissolved into putrid matter, thus, probably, aggravating the affection.

Dr. Hilliard relies on chlorate of potassa in diphtheria, giving young children three to five grains every two to three hours; adults, ten grains every three hours. To infants, he administers it with sugar, in a powder, rubbed on the tongue. After the height of disease he changes treatment to quinia and iron, and stimulants. During an epidemic in Salisbury Township, some years ago, while he was a sta-

dent, his preceptor, Dr. Rice, who saw from eight to fifteen cases daily of diphtheria, was accustomed to depend on the chlorate of potassa.

Dr. Drysdale had heard, during the discussion, only one serious objection to the use of chlorate of potassa in large doses, and that was, that it has been known, in cases of overdose, to cause congestion of the kidneys. In answer to this he would say that he had carefully observed the effects of the chlorate upon the urine, and had never seen it cause albuminuria, or to aggravate it, where it previously existed. In Dr. O'Hara's child it has been said that the system was saturated with the chlorate, and that it did not cure at the time, but as the child afterward recovered, the chlorate probably had something to do with it. Chlorinated water he has used internally, and as a gargle, but thinks it possesses no particular advantage. Tincture of iron is not indicated in the early stages, but is valuable in the later, especially where kidney complications arise. Some years ago he used lime freely, but saw no better results from it than from simple steam; now he generally uses steam only after tracheotomy. In all the cases in which he had had the opportunity of using the chlorate in the manner indicated he had met with a uniformly successful result.

Editorial Department.

Periscope.

The Retention of Images by the Retina.

We learn, from the London *Medical Record*, that in a recent publication, Dr. Kühne, Professor of Physiology, in Heidelberg, announces the startling confirmation of his previous researches, afforded by his having been able to obtain actual images on the retina which corresponded with objects which had been looked at during life.

The discoveries of Boll and Kühne must, as the latter remarks, have led to the thought that after all there might be some truth in the stories which we all have heard of images of things seen in death being left imprinted upon the eye. After his first researches, Kühne endeavored, over and over again, to observe on the retina of rabbits bleached spots corresponding to the images of external objects, but his endeavors failed.

As Kühne remarks, and as all readers who have understood his experiments will allow, in order to obtain a permanent photograph, or, as he terms it, "optogramme," the effect of the light would have to be so prolonged or so intense as to destroy the balance between the destruction of the vision-purple and the power of the retinal epithelium to restore it.

Kühne took a colored rabbit, and fixed its head and one of its eyeballs at a distance of a metre and a half from an opening thirty centimetres square, in a window shutter. The head was covered for five minutes by a black cloth and then exposed for three minutes to a somewhat clouded midday sky. The head was then instantly decapitated, the eyeball which had been exposed was rapidly extirpated by the aid of yellow light, then opened, and instantly plunged in 5 per cent. solution of alum. Two minutes after death, the second eyeball, without removal from the head, was subjected to exactly the same processes as the first, viz., to a similar exposure to the same object, then extirpation, etc.

On the following morning the milk-white and now toughened retinæ of both eyes were carefully isolated, separated from the optic nerve, and turned; they then exhibited on a beautiful rose-red ground a nearly square, sharp image, with sharply defined edges; the image in the first eye was somewhat roseate in hue, and less sharply defined than that in the second, which was perfectly white. The size of the images was somewhat greater than one square millimetre.

Professor Bunsen was among the witnesses of this beautiful experiment.

The Early Symptoms of General Paralysis.

Remarking on the large increase in this disease of late years, the *Lancet* asks:—

What is the first discoverable symptom of general paralysis? Enough is known to hazard the conjecture that some slight paralysis of the muscles of the lip, the nose, or the larynx, will be one of the earliest indications. Probably the loss of power may, at the outset, be limited to a few fibres of the muscle or muscles affected, and the sort of impairment which produces tremulous action—unbalanced and therefore unsteady contraction—will be manifested. Inequality of the pupils—perhaps from paralysis of the radiating fibres of the iris on one side—is a familiar but uncertain symptom, of no value except as corroborative. It may occur early, late, or not all. The catch in the voice produced by paralysis of a muscle or muscles concerned in articulation is a very common sign, sometimes occurring almost alone, and before the mind symptoms; but this, again, cannot be trusted. Such gross indications of locomotive embarrassment as a limp in the gait, from loss of power in the back or limbs, are probably, except in cases setting in with un-

wonted severity, not to be expected. The whole subject, however, is so involved that nothing certain can be said, except that in practical acquaintance with the affection and the means of early diagnosis we are strangely and most grievously in the dark. The sum of the information collected by writers on the disease is exceedingly small, and of that little no inconsiderable portion is confessedly based on conjecture. It cannot be otherwise, seeing that general paralysis is neither under the ken of the specialist, nor a malady which physicians in general practice consider within their province.

The characteristic exaltation of ideas which so frequently occurs as the first manifestation of brain disturbance probably marks a somewhat advanced stage of the disease, although in practice it is generally one of the earliest indications observed. As a rule, of course, it is not until the appearance of mind symptoms the affection falls under the notice of the alienist. The practical question is, what happens before this mental outburst? If the mystery is solved, it must be by the aid of the general practitioner. The early signs of the disease are of a nature which do not, in the present state of our knowledge, point to the issue, or even suggest the existence of a serious morbid process sapping the springs of life.

Cold in Typhoid Fever.

M. Petis, of Paris, in an address before the Medical Society of the Hospitals, said, in reference to this method of treatment, that, to his mind, the theory of cold recalls an old method, which made a great noise in its time, viz., bleeding. This doctoring rejects medical ontology. The hyperthermia alone is considered, and is the monster to be destroyed. The hyperthermia is only a symptom—a morbid element, and nothing more. The cold bath abstracts only the caloric, whilst the age, sex, and temperature of the patient are not considered. It is not, then, properly speaking, treatment. Every simple formula in pathology and therapeutics is doubtful. The following complications might result from its use:—

1st. Epistaxis, intestinal hemorrhage, the latter being observed five times in twelve cases where the system was adopted.

2d. Renal congestion and albuminuria.

3d. Congestion of the lungs.

4th. Syncope, from weakness of the heart's action.

When the blood is driven from the periphery, where does it go? To the least resisting part, and hence such accidents as above mentioned.

The Value of Hot Water Uterine Injections.

Dr. James Cody, of Watertown, Wisconsin, says, in the last volume of the Wisconsin State Medical Society *Transactions*:—

I have treated two cases of abortion with hot water injections, and with marked success; the flowing was very excessive in both cases; ergot had been given; also ice applied to the lower part of the spine, and small pieces introduced into the vagina, in one of the cases. Ipecac was given to produce emesis, but all was of no avail. In both of the cases the symptoms became alarming; after each pain the blood would flow in torrents, as it were, followed by syncope, the patient for the time becoming pulseless. The treatment by hot water injections recurring to my mind, although to me a novel procedure, I thought to give it a trial, and, to my great surprise, it acted like magic. In a few minutes all flowing ceased, and in less than half an hour the fœtus and secundines were expelled, and all bleeding ceased. Both ladies made an excellent recovery.

In eight cases of menorrhagia, in which the flowing was very profuse, the hot water injections proved most beneficial. In every case it controlled the flowing; in a few of the cases the treatment had to be persevered in for some time; many of the cases were of long standing; the injections were used once or twice a day. I have treated a few cases of dysmenorrhœa with the hot water injections, and apparently with much relief and benefit to the patient; yet my experience extends to but a few cases. In profuse menstruation no treatment has been so successful in my hands.

Precautions in Using the Hypodermic Syringe.

In the last volume of the *Transactions* of the West Virginia State Medical Society, Dr. John Frissell relates a case of mammary cancer proceeding from the puncture of a hypodermic syringe. He adds the following directions regarding the use of this instrument:—

In the first place the needle is to be polished and washed until it becomes perfectly clean and smooth.

Secondly, after thoroughly cleansing the inside of both needle and syringe, the fluid to be injected is to be slowly drawn in.

Then, thoroughly anointing the needle with a solution of carbolized glycerine (glycerine eight drachms, carbolic acid one drachm), the skin at the point selected for the injection is to be seized between the thumb and forefinger of the left hand, lifted up and made tense, and the needle pushed through at right angles, taking special care that its point neither touches muscle, gland, or other solid tissue. The fluid should be then slowly injected into the cellular tissue. After the withdrawal of the needle, a finger should be placed over its point of entrance and the part rubbed and pressed until it becomes perfectly smooth and flat.

Should there be any irritating ingredients in the injected fluid, their action, of course, must be regarded as independent of the condition of needle and syringe.

When I have been careful to follow strictly the directions above given, in the use of the hypodermic syringe, I have seen neither sores,

tumors, abscesses, nor bad results of any kind follow.

Carbolic Acid Spray in Catarrhal Diseases of the Respiratory Organs.

Dr. Moritz, in a communication to the Medical Society at Pittsburg, quoted in the London *Medical Record*, states that during the spring of last year he used carbolic acid spray with benefit in catarrhal diseases of the respiratory organs. Having had much to do with carbolic acid, and especially the spray, he noticed that the bronchial catarrh with which he was frequently troubled did not occur, or that, if it began, it was soon arrested. A colleague of his, Dr. Asseldelfft, made the same observation. Dr. Moritz used the spray of a two per cent. solution of carbolic acid. He first tried it on two children in whom the commencement of whooping cough was suspected. After the remedy had been used two days, the slight catarrh which was present came to a stand-still, and in a few days disappeared. In several children with measles, the cough was diminished, and the nights were more quiet after the use of the carbolic acid spray. In two surgical patients also, whose lungs were in a suspicious state, the cough entirely disappeared during the frequent use of the spray. On the other hand, it was ill borne by two phthisical patients, on whom he had made the experiment of its use.

A Simple Means of Lessening the Pain Attending Blisters.

The London *Medical Record* says:—The practice of blistering in the treatment of acute articular rheumatism would meet with much more favor in this country if pain, and in certain cases, strangury and slight hæmaturia, were not inherent to this mode of treatment. A hypodermic injection of morphia relieves the pain, but has no effect upon the urinary troubles. To alleviate the one and prevent the other, M. Ernest Besnier proposes the following plan. Take care that the blister is applied in the early morning; those convenient ones which are covered with a sheet of oiled tissue-paper will cause very little suffering, and never give rise to those vesicatory or renal troubles which are now and then so severe and painful, provided the blister be removed after a few hours, five to ten at the outside, as soon as the epidermis begins to rise slightly and partly, which we may recognize by the skin becoming pearly and irritated. The plaster must then be removed (a very few hours' application is sufficient for a child or a thin-skinned person), and its place must be supplied by a piece of blotting-paper very thickly coated with cerate or cold cream. The vesication continues almost painlessly, and the blisters rise nearly as well as if the cantharides had been kept applied. The practitioner who does not disdain to attend to such minute details will gain the thanks of his patient, and more especially of those who have been previously treated by such inhuman proceedings as are common where blistering is employed.

The Treatment of Delirium Tremens.

The following recommendations on this subject are made in the *American Practitioner*, by Dr. L. P. Yandell, Jr:—

Alcoholic stimulants are not justifiable in the treatment of this malady, except they be necessary to save life. Confinement without sedatives or stimulants is unjustifiably cruel. Chloroform is dangerous; so is the cold douche. Digitalis is the proper remedy when the urine is deficient and albumen is found in it. It has been given in half ounces of the tincture; drachm doses every few hours I prefer. Opium is a good remedy where the kidneys are acting well, and albumen is not present; otherwise it is dangerous. Sometimes opium increases delirium and insomnia. The best treatment, according to my experience, is an emetic of ipecacuanha to begin with, if the stomach is irritable or foul; a mild purgative, if the bowels are constipated; digitalis, in infusion, if the kidneys are inert; bromide of potassium in large and often repeated doses during the day. Give drachm doses, in abundant water or milk, hourly or every two or three hours. Chloral hydrate, in fifteen or twenty grain doses, in a dessertspoonful or a tablespoonful of syrup, and this, with an equal quantity of cream, should be given hourly at night, till sleep is procured. Of course the dose may require to be increased.

Look to the digestive organs carefully, and assist, encourage, and stimulate them, if necessary; stimulate them by condiments, aromatic and bitter tonics, and the like. Baths, warm or cold, often afford comfort to the patient. Make the unfortunates as comfortable as possible, and cross them as little as you can. Let the nurses humor them, and not dispute with them. Let them have quiet. Noise and visitors are abominations in any sick room, and especially should be excluded when we have disturbances of the nervous system to manage.

Treatment of Paraphimosis.

Dr. J. C. Watson suggests this manœuvre, in the *Southern Medical Record*:—

The œdema which takes place in the glans, as well as in the loose tissue above the stricture, can, by well applied pressure with the hand or fingers brought to a cone, be readily overcome in a few minutes, and with little or no pain to the patient, and then by a sudden and dextrous movement the everted prepuce can be brought forward over the now much reduced glans, and your patient may now be up and "go his way rejoicing," while in the plan of reducing the trouble by cold applications, astringents, etc., or later, by the knife and scissors, much delay is brought about, and frequently much pain endured.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The Report on the Influence of Climate on Pulmonary Diseases in Minnesota, by Dr. Franklin Staples, made to the American Medical Association, has been reprinted in pamphlet form. It is favorable—we are inclined to believe too favorable—as regards the benefit of the Northwest to consumptives.

——"The Sanitary Relations of Hospitals," is the title of a thoughtful paper, by Dr. William Pepper, of this city, republished from the *Transactions* of the American Public Health Association.

——Dr. Horatio R. Storer, of Boston, is the author of an excellent article, republished from the Edinburgh *Medical Journal*, on "The Importance of the Uterine Ebb as a Factor in Pelvic Surgery."

——"The Use of Uterine Supporters," is the title of a pamphlet, by Dr. Clifton E. Wing, of Boston. He advocates them, but believes that many that are lauded are worthless, and that to adjust them requires much more skill than is generally supposed.

——We also acknowledge:—"Considerations in Relation to Diseases of the Joints," by David Prince, M. D.; "Annual Report of the Western Pennsylvania Hospital for the Insane;" do., 12th Ward Department.

BOOK NOTICES.

The Tonic Treatment of Syphilis. By E. L. Keyes, A. M., M. D., etc. New York, D. Appleton & Co.; cloth, pp. 83.

To treat syphilis by mercury is not new, nor is it new to treat it by tonics; but what Dr. Keyes claims as new is that mercury itself, in *small doses*, is a tonic, and a very efficient one in constitutional disease from this cause. His present short monograph is an enlargement of one or two articles previously given to various medical journals. He devotes two chapters to general treatment; one to local. The results, he thinks, have been superior to those by the old methods. Two or three years is the time he asks to complete the cure.

The novelty in Dr. Keyes' treatment may be briefly stated to be this; the daily amount of any given preparation of mercury beyond which the patient cannot go without the aid of opiates is his *full dose;* if long continued, the effect of this will be damaging to his constitution, and such an amount should not be pressed beyond the disappearance of the worse symptoms. One-half this amount is a *tonic dose*, and on this he may remain for an almost indefinite period, at least, till all the minor symptoms have disappeared.

Propositions and Resolutions of the Association of Medical Superintendents of American Institutions for the Insane. Published by order of the Association. Philadelphia, 1876; cloth, pp. 32.

This volume, though containing but thirty-two pages, has enough matter in it to occupy a thoughtful mind much more than that many hours. It is printed in accordance with a resolution, at the last meeting of the Association to which the title refers, that a committee should be appointed to state the objects of the Association, and to "collect its utterances of opinion."

This has been done with the utmost brevity, and the "utterances" usually appear in the form of propositions. They relate to such subjects as the construction and organization of hospitals for the insane, restraint, religious services, care of insane criminals, care of inebriates, legal relations of the insane, etc.

It is safe to say that many of the positions taken will be earnestly combated, not only by the profession at large, but by alienists in other countries. For instance, there is evident, in parts, a spirit of condemnation of private asylums, whether for the insane, or for inebriates, in which we hope and believe the mass of the profession will not concur. There is also an opposition to outside control of public institutions, through a system of inspection (by "supernumerary functionaries," as they are termed by the Association), notwithstanding the fact that in Great Britain very important benefits have accrued from such inspection.

On the whole, while much in the book reflects great credit on the Association, a portion of the contents does the reverse, betraying a desire to monopolize this specialty, without willingness to answer fairly to the common weal for the stewardship of such a gigantic trust.

THE

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THE PREVENTION OF CRUELTY TO CHILDREN.

The aims of enlightened sanitation and philanthropy cannot be dissevered. The schemes which the friends of humanity devise to relieve misery and succor distress, all rest, if they are sound, on the principles of hygiene, and from these must receive their endorsement. Hence the physician, more than another, is called to participate in and pronounce upon benevolent projects.

One such has lately been organized in this city which, if carried out with earnestness and without obtrusiveness, must command all our applause. We refer to "The Society to Protect Children from Cruelty." The subject is one not novel to the readers of this journal. On more than one previous occasion the editorial columns of the REPORTER have pointed out the need of some such authoritative association to protect that class of the population least able to protect themselves. For instance (REPORTER, vol. xxvii), the injurious effects of exacting excessive labor from minor children were pointed out and proved by abundant evidence. Here, and elsewhere, such a society has a wide sphere of usefulness, and should be organized in every large city.

In its announcement the Society asserts, with force and justice, that hitherto no friendly and powerful hand has been habitually extended to rescue these little ones from lives of misery and danger, to place them under the shield of the law, and where natural protection has failed, or has been transformed into brutality, to bring them, by an order of the Court, under the merciful care of some orphan home or other sanctuary provided for the desolate and oppressed. It is no part of the Society's duty to interfere between parent and child, guardian and ward, master and apprentice, but only, where relations of authority and of trust have been grossly violated, to make that appeal to Courts of law which the subjects of its compassion are too young and too helpless to make for themselves. To quote the recent testimony of a detective, "hundreds of cases of cruelty to children would come to light under a well organized society, which would otherwise not be made public." It is for the purpose of bringing these clearly defined instances of cruelty or neglect into contact with existing laws, that this Society is formed. It desires to pursue its work not vindictively, but in a spirit of justice and mercy; and with no sectarian bias, but simply in the interests of pity and humanity toward the injured and defenceless.

The particular cases where this Society is called upon to act are such as the overtasking of children in factories and mines, forcing them to the performance of dangerous and hurtful feats for the entertainment of the public, cruel usage of those serving in families or bound out to trades, the employment of them as beggars, and the exposure of them at inclement seasons, in insufficient clothing, as musicians, etc. There is much to occupy it in all these directions, and no one will claim that it is a superfluous organization.

Notes and Comments.

Genu-Pectoral Position in the Treatment of Uterine Disorders.

According to Dr. Edis, of the Middlesex Hospital, London, this method, apparently but little known and seldom resorted to, proves of much service in all cases of retroversion and retroflexion, more especially when metritis also exists. In a short time patients become accustomed to the posture, and will say that they can get more relief in one hour by resorting to this method than by lying down in the ordinary position for several consecutive hours. The uterus falls forward in the abdomen, pressure posteriorly being thus removed; the distressing pain in the back, frequently complained of in these cases, disappears within a short time. In many instances, where a Hodge's pessary cannot be tolerated under ordinary circumstances, by resorting to this position for a quarter of an hour occasionally during the day, the instrument can be worn with comfort. The genu-pectoral position, also, offers manifest advantages in the replacement of the retroverted gravid uterus; also in pressing the uterus up beyond the pelvic brim in cases of impacted fibroids. In cases of prolapsus and subinvolution, much may be gained by adopting this position. In the morning sickness of early pregnancy, and in cases of prolapse of the ovary, considerable relief may be thus obtained.

The Use of Astringents in Typhoid Fever.

The management of the alimentary canal in typhoid is certainly a subject of prime importance. Some sensible remarks on it were made lately, by Dr. Hayden, in one of the London medical societies. He justly observed that the habit was unfortunately too prevalent, of treating constipation with purgatives and diarrhœa with astringents. He thought in most instances that the object might be accomplished by unloading the lower bowel, and effecting the remainder by diet. There was one mode of treatment, blistering the ilio-cæcal region, which he had found of the greatest value. The astringent which he had found most useful in the treatment of these cases of diarrhœa was sulphurous acid, fifteen to twenty drops, with five drops of laudanum. One of the principal objects in the treatment of typhoid fever should be the regulation of the diet. Dr. Grimshaw had directed attention to the danger of administering solids too early in such cases; but as long as the temperature was above the normal standard, in his (Dr. Hayden's) opinion it was not safe to administer even a particle of solid food.

Excessive Use of Digitalis.

In the *Archiv für Heilkunde*, Bd. xvii, Dr. Bälz records the case of a woman afflicted with a high degree of mitral stenosis, who had, through a prolonged use of large doses of digitalis, so accustomed herself to the drug that without it she fell into the most miserable condition; this was almost magically removed by the exhibition of digitalis. She used daily, morning and evening, 0.3 grm. of digitalis (nearly gr. v), and had in seven years taken over 800 grm. (more than two pounds) of the preparation. There are some whose enthusiasm, not to say recklessness, may lead to similar results. We have seen cases in which the use of digitalis has been carried to excess, and even the patients led to regard it as perfectly safe for them to take almost at discretion.

Copaiba as a Diuretic.

In the last volume of Guy's Hospital Reports is a paper, by Dr. F. Taylor, on "The Diuretic Action of the Resin of Copaiba." A series of detailed clinical observations show that the resin has a very powerful diuretic influence, and has been administered with benefit in various forms of dropsy, renal and cardiac, as well as ascitic. The advantage of the resin is its tastelessness. It is given suspended with tragacanth powder.

Electricity in Ulcers.

From the last volume of Guy's Hospital Reports we learn that the treatment of ulcers by the local application of a weak, continuous electrical current has been extensively tried by Mr. Golding Bird, who has found that as good a result is obtained as with any other gently stimulating application, and that this means will sometimes succeed when ordinary methods of obtaining cicatrization fail.

Iodide of Starch as an Antidote.

The *Chemist and Druggist* says that Dr. Bellini, Florence, observing that iodide of starch is free from the unpleasant taste and irritant properties of iodine, and can therefore be taken in strong doses by weak stomachs, states that

numerous experiments have shown that at the ordinary temperature of the human stomach, and in presence of the gastric juice, it combines with most poisons, forming therewith either insoluble compounds or soluble compounds which are innocuous, if not present in excess. It is especially useful in cases of poisoning with sulphur, ammonia, alkaline and earthy sulphides, and the various alkaloids. It is recommended, too, for its safety in cases of poisoning where the cause is unknown.

Inoculation of Cancer.

A late number of the *Centralblatt* contains an account, by Dr. Nowinsky, of St. Petersburg, of two successful cases in which a small piece of medullary cancer taken from the nose of one dog, and implanted on a healthy wound (which was afterwards cured) on the back of another dog, produced nodules at the seat of inoculation, whose structure resembled that of the primary cancer. The examination was made in one case five months, in the other six weeks, after the inoculation. A number of inoculations on inflamed skin all failed; out of fifteen on healthy skin, two succeeded.

Croton-chloral in Whooping Cough.

Dr. Wm. Paulson, a practitioner of Leicestershire, writes to the *Lancet*:—

I do not know if the administration of croton-chloral in whooping cough has any originality; but, after a somewhat extended trial, I regard it as almost a specific, and should be glad to have the opinion of other medical men as to its results. I have given it in gradually increasing doses, commencing with one grain twice or thrice a day, and almost without exception there has been a very marked reduction, both in the violence and the frequency of the attacks.

Importance of the Study of Insanity.

The *Lancet* calls attention to the general neglect of mental disease by all but specialists in the profession, and with great justice points out the serious consequences resulting from this. It is only too obvious that easily curable cases of psychical disease will become incurable, the victims of morbid despair or secret delusions will die, until the profession generally reclaims for itself a department of medicine which ought never to have been allowed to slip out of its hands. A practical acquaintance with diseases affecting the mind is as essential as any other branch of knowledge. The instant recognition and treatment of mind symptoms is even more important than the prompt diagnosis of physical maladies; and every practitioner should be prepared, not only to discover the mental state, but to apply the appropriate remedy.

Remarks on Style.

A correspondent in Tennessee suggests some further rules for writers for medical journals, in addition to those given in our issue of February 24. He objects to the frequent use of "the former and the latter," or the "first and the second," instead of repeating the topics under discussion. Such repetition may be somewhat homely, but insures perspicuity. Next he criticises the affectation of new and strange words, which so often obscure modern scientific articles. And lastly, he calls upon writers to translate the quotations from foreign languages they give.

Preliminary Injections of Morphia in Paracentesis Thoracis.

M. Vibert, as the result of several cases in which he has tried it, states, in the *Journal de Therapeutique*, that the advantages of the preliminary injection of morphia in the operation of thoracentesis, and indeed in any operation which may give rise to syncope, may be thus summed up:—1. It very much mitigates the suffering inherent to the operation. 2 It protects those operated upon from syncope, and its redoubtable consequences. 3. It obtains for them a sense of comfort, which is produced as soon as the operation is finished, which persists for many hours, and which may be prolonged by additional injections.

The Breath after Coitus.

A curious and important observation, by Dr. Preismann, of Nicolaeff, is recorded in the *Med. Beamten Zeitung*, No. 2, 1877. It is, that for about six hours after coitus there is a peculiar odor discernible in the breath, probably owing to a secretion from the buccal glands. It is perceptible in both sexes, and at all ages, though most so in the male sex at about 35 years of age. Dr. Preismann could distinguish it in some persons at a distance of four to six feet. He adds an instance of the value of this observation. A man was arrested for alleged rape,

two hours after it was stated to have taken place. On account of the absence of the characteristic odor, Dr. Preismann deposed positively that the accused had not had connection of any kind within six hours; and further investigations confirmed the innocence of the arrested party.

CORRESPONDENCE.

Hepatic Abscess Aspirated with a Davidson's Syringe.

ED. MED. AND SURG. REPORTER:—

With the hope of benefiting my brethren, the country practitioners, who, as a rule, cannot afford the costly luxury of a Dieulafoy's, or other aspirator, I am incited to communicate to them the following résumé of an operation performed for abscess of the liver.

Patient, Ellen A., aged six years, attacked Jan. 25th, with acute inflammation of the liver, followed by abscess of that organ. After deciding positively as to the presence of fluid, the question arose, how shall I get it out? I had no aspirator, and could obtain none; yet the offending imprisoned pus had to come out. Assisted by Dr. J. C. Spinks, the following plan was adopted, which proved an easy and efficient method of solving the difficult problem. A common blow-pipe tube, sharpened and attached to the elastic tube of a Davidson's syringe, answered the purpose of a needle. This was plunged into the cavity of the abscess after the integument had been incised; the tube was compressed near the needle, simultaneously with the compression of the bulb of the syringe, to prevent a backward action from injecting air into the abscess. The pus was safely and effectually withdrawn. With this simple device, which costs only $2 50, and which is within the reach of every physician, the operation for hydrothorax, hydropericardium, ovarian tumor, etc., can be performed as well as with the best aspirator; and he who neglects to perform them, when necessity demands it, is guilty of culpable neglect of duty, and should not disgrace the physician's high calling.

R. M. HAND, M. D.

Shubuta, Miss., Jan. 23d, 1877.

Anæsthesia by Rapid Breathing.

ED. MED. AND SURG. REPORTER:—

I noticed a paragraph taken from the *Medical Record*, if my memory serves me, on the production of anæsthesia by rapid breathing, which I thought at the time was entirely new as well as unique. Since that time I came across an article by Dr. Woodhouse, Professor of Chemistry in the University of Pennsylvania, in which the same results were obtained in a different way. Dr. Woodhouse, it will be remembered, was Professor in the University of Pennsylvania in 1802. He was preparing nitrous oxide gas "from the nitrate of ammoniac, made by decomposing nitre by the sulphate of ammoniac, and by adding the nitric acid to sal ammoniac."

The gentlemen of his class saw the experiments going forward in the laboratory for the generation of the gas, and they were to try the experiment of inhalation in the afternoon. The gas turned out to be impure, as the professor ascertained before the class assembled, so "the impure air was thrown away, and the air holders filled with atmospheric air."

"This air was breathed by a variety of persons, under the impression that it was nitrous oxide, and the greater part of them were affected with quickness of pulse, dizziness, vertigo, tinnitus aurium, difficulty of breathing, anxiety about the breast, etc."

The Professor received the following letter from one of the gentlemen:—

"The nitrous oxide produced no sensible effect, for perhaps the space of a minute after I began to respire it. Soon after I was affected with tinnitus aurium, which affected the sense of hearing, in the same manner as water, in a state immediately preceding ebullition, does. At the same time I had a sensation similar to that produced by swinging; afterward a difficulty of breathing gradually came on, which at length necessitated me to discontinue the respiration of the air. The difficulty of breathing and the tinnitus soon subsided, but the peculiar sensation in my breast continued some time longer, and was succeeded by slight nausea, which continued for six or eight hours."

Dr. Woodhouse attributed the effects of this inhalation, as described by his students, to the "influence of the imagination," but I see good reason to believe that it was nothing more than the effects of rapid inspiration, as described in the paragraph first mentioned.

THOMAS F. WOOD, M. D.

Wilmington, N. C., Feb. 21st, 1877.

An Epidemic.

ED. MED. AND SURG. REPORTER:—

There is a peculiar form of disease prevailing in this locality, that seems, thus far, to baffle the diagnostic skill of all practicing physicians. It is confined principally to children. The prodromic stage usually lasts from about four to seven days, there being considerable nervousness or uneasiness exhibited, drowsiness at times, and a dry, and in some cases, a persistent cough. Then comes what I call the "cold stage," which lasts but a few hours; the extremities become extremely cold, and covered with bluish-purple spots about the size of a silver quarter. Emesis soon follows, the vomit being principally mucus, or of that appearance, tinged with green. The febrile stage is then ushered in, the axillary temperature ranging from 104 to 106°, the pulse about 140. This stage lasts from one to four days, depending upon the treatment pursued. During resolu-

tion there is a distinct mucous râle, but little or no expectoration.

Before I learned the course of the affection it would continue about four days, and then recovery would take place slowly. Now, when I am called, which is generally about the time that the disease passes from the second to the third stage, I prescribe Norwood's tincture veratrum viride, as a febrifuge, and hyd. cum creta, to promote the hepatic secretions, to be followed by oil or Rochelle salts, in ten or twelve hours if there be no movement of the bowels before. Under this simple treatment all symptoms disappear and the child is about its play inside of twenty-four or thirty-six hours.

Query.—What shall we call it?

EIBERT T. RULISON, M. D.

Bath on the Hudson, N. Y., Feb. 23d, 1877.

Can a Woman Carry a Child to Full Time and not be Aware that She is Pregnant?

ED. MED. AND SURG. REPORTER:—

On the morning of January 31st I was called hastily (by her husband) to see Mrs. C. In reply to my inquiry, what is the matter with your wife? Mr. C. answered, I do not know, but I left her suffering severe pain. On my arrival at the house I found the patient, a young woman, aged 24 years, standing in one corner of her room, holding on to the back of a chair, beside a commode, and in the vessel of the latter, immersed in about two pints of blood and urine, head downwards and almost drowned, was a new-born male child; the placenta was still retained, and the mother held fast by the cord, which was stretched to its fullest extent. As quickly as possible I extricated the child from its very unpleasant and dangerous bath, cut the cord, and having rolled the bedstead over to where the mother stood, laid her down and soon made her comfortable in bed, after which the placenta was expelled, and her recovery was as satisfactory as in the case of those delivered in the usual way.

The child thrived, and did as well as one born amidst much more agreeable surroundings. On pressing my inquiries, the mother was very emphatic in asserting her entire innocence of any knowledge of her condition until the birth of the child, not even knowing what the pains of labor were when seized with them; she had never felt any motion; had perceived no enlargement, wearing garments with same size bands all the time; she had not menstruated for over twelve months, which was not unusual with her, yet only a week before her confinement she had consulted a physician, who prescribed for this irregularity. The truthfulness of the mother's statements are corroborated by the fact that neither she nor her husband would have any motive for concealment, as they both seemed anxious to have a child; added to this, there was no preparation made for the "event," notwithstanding the parents were persons of refinement and plenteous providers. Taking all the facts of the case into consideration, we are led to ask, Can a woman carry a child to full time, and not know that she is pregnant? If we are governed by the case of Mrs. C., we must answer in the affirmative.

THOMAS S. BUTCHER, M. D.

Acute Gastritis.

ED. MED. AND SURG. REPORTER:—

September 12th, 1876, I was called to see J. H., a woman 25 years old, who had been sick about forty-eight hours. She was complaining of a very severe pain in her stomach, constant nausea, and now and then vomiting, headache, vertigo, and very marked debility, "a fainty sickness," as she called it; very slight pressure over the epigastric region would cause pain. Pulse 85, full and strong; temperature 101°; the tongue was intensely red and swollen, bowels constipated, and kidneys not acting freely, and persistent thirst; being in the country, and not having access to the sheet anchor (ice), I resorted to other means to relieve thirst, such as lemonade bi. tart. pot., and endeavored to alleviate the general symptoms. Ordered bi. tart. pot., to be taken ad libitum, to relieve thirst, to move the bowels, and as a diuretic. To check the inflammation I used the following treatment:—

℞ Veratrum viride, gtt. xv
Magendie's sol. (of morphia), gtt. xxv to xxx
Carbolic acid, gtt iv
Aqua menthæ pip., ℥j. M.
Sig. Take one teaspoonful every three hours.

I have used this treatment in several cases of acute gastritis, with entire satisfaction, always reducing the fever, and checking the inflammation, relieving the nausea and vomiting, etc., and think it commendable in cases where ice and leeches cannot be had.

JOHN M. WHITE, M. D.

Pleasant Ridge, Alabama, Feb. 15th.

Hot Water for Treatment of Sick Stomach.

ED. MED. AND SURG. REPORTER:—

I notice in the REPORTER several articles on the treatment of sick stomach, and seeing nothing like my own, I thought I would give a few of the many cases in which I have found speedy relief from the use of *hot* water, after the stomach and bowels were emptied, and the patient completely exhausted from vomiting and purging.

Mrs. W. After the usual treatment had failed, and continued obstinate heaving for thirty-six hours, at intervals of twenty to thirty minutes, I was called in consultation with her family physician. Found her with cold feet and hands, sunken features, pulse 140 per minute, tongue dry. I ordered half a glass of *hot* water, but she, like all such patients, protested, saying that warm water would only increase the trouble.

I remarked that I did not intend giving warm water, but hot. In a few minutes the patient was asleep and had no further trouble. Seeing such happy results in a score of cases, I would impress upon those wishing to test it to use water as hot as the patient can bear it.

Cloversport, Ky. JAMES T. OWEN.

NEWS AND MISCELLANY.

COMMENCEMENT EXERCISES.

Jefferson Medical College.

The fifty-second annual Commencement of the Jefferson Medical College took place March 10th, at the Academy of Music. The Academy presented a brilliant and imposing appearance, the audience being extremely large, and the floral tributes to the graduates by their lady friends were numerous and exceedingly beautiful.

At eleven o'clock the Germania orchestra, under the leadership of George Bastert, commenced the entertainment with a popular selection, after which the Rev. W. Rudder, D. D., made an impressive prayer.

The conferring of the degree of Doctor of Medicine was then gone through with by E. B. Gardette, M. D., president of the Board of Trustees. The total number entitled to the degree was 198.

The following prizes were awarded :—

1. A prize of $100, by H. C. Lea, Esq., for the best Thesis, to Leonardo D. Judd, of Illinois, with honorable mention of the Theses of Samuel E. James, of Kentucky, and George A. Hewitt, of Pennsylvania.

2. A prize of $100, by Hon. H. M. Phillips, for the best Preparation of the Cranial Nerves, contributed to the Museum, to Samuel E. James, of Kentucky.

3. The Toner Medal, by J. M. Toner, M. D., of Washington, D. C., for the best Thesis, based upon original investigation, to A. H. R. Gulley, of Pennsylvania, with honorable mention of the Thesis of William L. McCandliss, of Pennsylvania.

4. A prize of $50, by the Professor of Obstetrics, for the best paper on the Obstetric Forceps, their description, and how, when, and why to use them, to Washington C. Detwiler, of Pennsylvania, with honorable mention of the papers of W. K. T. Sahm and E. W. Bing, both of Pennsylvania.

5. A prize of $50, by the Professor of Practice, for the best Report of Clinical Cases, to George A. Hewitt, of Pennsylvania, with honorable mention of the Reports of Samuel B. Arment and Charles Wirgman, both of Pennsylvania.

6. A prize of a Pocket Operating Case, of the value of $25, by the Demonstrator of Anatomy, for the best Dissection in the Anatomical Room, to Samuel B. Arment, of Pennsylvania.

7. A prize of a Gold Medal, by the Demonstrator of Surgery, for excellence in Bandaging, to Henry C. Fegley, of Pennsylvania, with honorable mention of T. M. Throckmorton, of Iowa.

8. A Gold Medal, by R. J. Levis, M. D., for the best Report of his Surgical Clinic at the Pennsylvania Hospital, to A. H. R. Gulley, of Pennsylvania, with honorable mention of the Reports of John A. Mitchell, of Illinois; Chas. Wirgman, of Pennsylvania; George F. Souwers, of Pennsylvania; Wm. Dinwoodie, of Rhode Island; and Wm. Deats, of Pennsylvania.

The valedictory address was then delivered by John B. Biddle, M. D., Professor of Materia Medica and General Therapeutics. He gave an excellent address, full of sound advice, and was listened to with marked attention.

The Medical Department of The University of Pennsylvania.

The Commencement of this venerable institution took place at the Academy of Music on March 13th, with the usual pleasant accompaniments of music, flowers and beauty. Prayer was offered by the Rev. E. R. Beadle, and the degrees conferred by Provost Charles J. Stillé, assisted by Prof. Rogers, Dean of the Faculty.

Of the one hundred and twenty-one members of the class, there were seventy from Pennsylvania; eleven from New Jersey; five from Maryland; four from Virginia; three from California; two from Delaware; two from Illinois; two from Iowa; one each from Maine, Rhode Island, Connecticut, West Virginia, North Carolina, Mississippi, Ohio, Indiana, District of Columbia and Indian Territory. Brazil, Nova Scotia and Prince Edward's Island had two representatives each, while there was one from each of the following countries: England, Scotland, Turkey, Roumania, Chili and Mexico.

After the ceremony of graduation, Dr. Rogers announced the award of prizes and distribution of honors. The alumni prize and the Henry C. Lea prize were given in the following order, with the following sums: To Andrew J. Parker, Jr., of Philadelphia, a prize of $100, for his essay on "Cerebral Convolutions;" to George A. Piersol, of Philadelphia, $50, for his essay on "Minute Anatomy of the Cornea;" to Henry Formad, B. M., of Jassy, Roumania, $50 for his essay on "The Distribution of the Nerves of the Iris." The anatomical prizes offered by Dr. H. Lenox Hodge, demonstrator of anatomy in the University, were then bestowed. Thomas Getty Ricketts, A. B., of Elkton, Md., received the gold medal, for the best anatomical dissection; G. Edgar Dein, of Providence, Pa., $30, for the most complete set of observations of anatomical anomalies. The "chemical prize," a gold medal, given by the Professor of Chemistry, was awarded to William Chamberlain, Jr., of Moorestown, N. J., for researches in metallurgy conducted in the working chemical laboratory of the University. Three essays were pronounced to be of "dis-

tinguished merit," and nine adjudged worthy of honorable mention.

Professor Joseph Leidy, LL.D., was then introduced as the valedictorian, and concluded the ceremonies with a very appropriate address.

The Woman's Medical College.

The Commencement took place March 15th, at the Hall of the Young Men's Christian Association. The ceremonies were opened with prayer, by Rev. D. O. Kellogg, D. D. This was succeeded by the conferring of degrees upon the graduates, by the President, T. Morris Perot, which was followed, in turn, by the delivery of the valedictory address, by Professor Isaac Comly, M. D.

The only prize was that for the best thesis, and consisted of a purse of $50. It was awarded to Elizabeth A. Follansbee, of California, for a dissertation, entitled, "A Review of Medical Progress."

The following is a list of the graduates, their places of residence, and the subject of their several theses:—

Frances N. Baker, Pa., Ferrum; Cornelia L. Boardman, Mass., Diphtheria; Josephine G. Davis, N. J., Typhoid Fever; Martha M. De Graw, Pa., The Brain; Elizabeth E. L. Forbes, Del., Scarlet Fever; Elizabeth A. Follansbee, Cal., Review of Medical Progress; Romania, B. Pratt, Utah, Puerperal Hemorrhage; Caroline S. Pease, N. Y., Trichinosis; Elvira Rainier, Mich., Endometritis; Elizabeth T. Richards, Mich., Gelseminum; Elizabeth W. Smith, Pa., Inflammation; H. Josephine Varnum, Me., Nitrous Oxide; Ella M. Whittaker, N. Y., Typhoid Fever; Henriette B. Woolston, N. J., Digestion; Mary A. Young, Pa., Syphilis.

Alumni Associations.

The Alumni Associations of the Jefferson and University of Pa. met shortly before the Commencements of the schools. Before the former, Dr. William B. Atkinson delivered a very able address on "Medical Organizations and their value;" while before the latter, Dr. J. J. Woodward, U. S. A., spoke on Microscopic Histology, embellishing his subject with striking illustrations.

Both meetings were well attended, and did good work for the future.

Total Number of Graduates in Philadelphia.

The total number of physicians and pharmacists graduated in this city during the last winter was 587, distributed as follows:—

Philadelphia University	11
Philadelphia Dental College	67
Pennsylvania Dental College	35
Hahnemann Medical College	50
Jefferson Medical College	198
University of Pennsylvania (Medical Department)	121
Woman's Medical College of Pennsylvania.	15
College of Pharmacy	90

Graduating Classes.

—At the annual Commencement of the Buffalo Medical College, February 20th, thirty graduates received the diploma of Doctor of Medicine.

—The thirty-fourth annual Commencement of the Rush Medical College took place February 21st. The Degree of Doctor of Medicine was conferred on one hundred and three gentlemen.

—At the Woman's Hospital Medical College, Chicago, four graduates received diplomas in medicine on the 27th ult.

—The Hospital Medical College, Louisville, graduated forty-one students on the 22d of February.

—The Louisville Medical College, Louisville, conferred diplomas on forty-seven graduates on February 27th.

—The Medical Department of the University of Louisville conferred the degree of M. D. on seventy-seven graduates on March 1st.

—The University Medical College, New York, conferred the degree of M. D. on 157 graduates on February 20th.

The Bellevue Hospital Medical College, New York, graduated a class of 147 doctors on the 27th ult.

—The College of Physicians and Surgeons, New York, conferred 118 degrees of M. D. on March 1st.

The Maine Pharmacy Law.

A pharmacy law, in Maine, has been recently passed, and received the sanction of the Governor February 9th. According to its provisions, the Governor has to appoint three *suitable persons* to be commissioners of pharmacy, who are to examine every applicant desiring to engage in the business of an apothecary; said applicant must have been employed in an apothecary store where physicians' prescriptions are compounded, at least three years, or must have graduated from some regularly established *medical school* or *college of pharmacy*, and be *competent for the business*. The act does not apply to physicians putting up their own prescriptions, or to the sale of proprietary medicines.

Pharmaceutical Products.

We have received from the laboratory of Messrs. Parke, Davis & Co., Detroit, Michigan, very handsome specimens of their pharmaceutical products, extracts, fluid and solid, pills and elixirs. They are commendably energetic in preparing articles lately introduced into the materia medica, such as Jaborandi, Ustilago maidis, Grindelia squarrosa, Damiana, Yerba Santa, Eucalyptus, etc., all of which can be obtained in various forms from them, and, we do not doubt, accurately prepared.

Centennial Award to Messrs. Billings, Clapp & Co.

Those who visited the Centennial Exhibition will have noted the very handsome display of chemical and pharmaceutical products by the above firm. We take pleasure in giving a place to the official award of the judges who examined in this department of our grand national display :—

[Copy.]

AWARD TO MESSRS. BILLINGS, CLAPP & CO., BOSTON.

The undersigned, having examined the products herein described, respectfully recommends the same to the United States Centennial Commission for Award, for the following reasons, namely :—

A very fine display of Chemicals, *especially* Carbolic Acid, Propylamine (Trimethylamine), Chloride of Propylamine; and also of Pharmaceutical Chemicals, such as Citrates of Iron and Quinia, Citrates of Iron and Manganese, Citrates of Bismuth and Ammonium, Pyrophosphate of Iron, Bromide of Potassium, Bromide of Ammonium, Chromic Acid, Valerianic Acid, and many others. Commended for fine display and *excellence* of chemicals.

F. A. GENTH.
[Signature of the Judge.]

Approval of Group of Judges.

J. LAWRENCE SMITH. DR. V. WAGNER.
P. DE WILDE. CHARLES A. JOY.
E. PATERNO. J. W. MALLET.
F. KUHLMAN.

Obituary Notes.

—W. G. Nugent, well known as a successful physician and surgeon, died at Pittston, Pa., March 6th. Dr. Nugent was a Virginian by birth, but for a number of years has been a resident of Pittston. During the late war he served as a surgeon in the Union Army.

—Charles B. Parkhurst, M. D., youngest son of the late L. M. Parkhurst, of Vermont, died at Colorado Springs, Col., January 16th, aged 34 years.

—Dr. Buckler Jones, a well-known physician of Baltimore, committed suicide last week, by cutting his throat. Since December 6th Dr. Jones had been residing at the Spingler House, New York, but returned to Baltimore on Sunday last.

Personal.

—John S. Newton, M. D., PH. G., has been elected professor of materia medica, therapeutics and botany, in the Pennsylvania College of Pharmacy. He is a graduate of the Jefferson Medical College, and of the Philadelphia College of Pharmacy. Formerly he was assistant professor of chemistry in the Central High School.

—Grace, the celebrated English cricketer, has become a doctor of medicine. He still believes in physical culture.

Items.

—A young physician of Kent Co., Md., was carried from his room, bound to a tree and flogged, one night in February, for alleged seduction. It is to be hoped that his sufferings were unmerited.

QUERIES AND REPLIES.

Stomatitis Materna.

If Dr. J. J. J., of Ark., will try the saturated tincture of polygonum punctatum (smartweed), in doses of one fluid drachm three times a day, his patient will improve. The tincture diluted may be used as a wash repeatedly. I have seen many obstinate cases promptly cured by it.

Alton, Ohio. L. WOODRUFF, M. D.

Dr. J. J. J., of Ark., desires a remedy for stomatitis materna. I have found the following do well for some obstinate cases :—

R. Red iodide of hydrarg ..... five grains each
Hyd. potass., ... one ounce.
Aquæ puræ, ... M.

Sig.—4 or 5 drops in water, three times a day; also put 10 drops in half a glass of water, and use for gargle for the mouth and throat, 3 or 4 times a day.

Let J. J. J., of Ark., try sub. carb. bismuth in stomatitis materna, 10 grains three or four times daily; it has acted most satisfactorily, and promptly relieved it, in my patients. My attention was called to it by a country doctor, in the MEDICAL AND SURGICAL REPORTER, last year.

S. E. WILLS, M.D.

Dr. L. H. of Ark.—The *Dental Cosmos* is published by S. S. White, Phila. Price $2.50 per year.

MARRIAGES.

RALSTON—STEWART.—February 20th, at Locust Grove, Salem, Ohio, by the Rev. H. B. Fry, David Ralston, M. D., of Carlisle, Pa., and Agnes Stewart.

DEATHS.

ATWOOD.—In Brooklyn, New York, November 1st, Robert N. Atwood, M. D., aged 38 years, son of the late Dr. Atwood, of Ascutneyville, Vt.

BUCK.—On Tuesday, March 6th, at his late residence, Gordon Buck, M. D., in the 70th year of his age.

CHAMBERLIN.—In South Britain, Conn., January 26th, of cancer of the stomach, Dr. E. C. Chamberlin, aged 55 years; also, February 2d, of congestion of the lungs, Mary, wife of Dr. E. C. Chamberlin.

CRAIG.—In Somerville, N. J., on Saturday morning, March 3d, of congestion of the brain, Dr. S. Henry Craig, formerly of Philadelphia.

GUERNSEY.—In this city, on the morning of the 16th instant, William F. Guernsey, M. D.

HILL.—Dr. Milo W. Hill, born in Pompey, Onondaga County, and a resident of Buffalo, New York, since 1826, died yesterday afternoon, aged 72 years.

JEWETT.—In Woodstock, February 2d, Mary Adelaide, wife of Dr. F. R. Jewett.

SEIP.—At Bath, Pa., March 8th, of pneumonia, Samuel Gross Seip, only son of Dr. W. H. and Lydia H. Seip, aged 11 months and 17 days.

TYSON.—In Norristown, Montgomery Co., Pa., on Saturday morning, March 3d, 1877, Grace Estelle, daughter of Dr. A. R. and Mary Tyson, in the 10th year of her age.